

Ayaltis INSIGHT - July 2018

Topic of the Month:

The Upside of the Downside: Convexity

The first half of 2018 has just ended and volatility staged its long awaited comeback. A huge relief for active managers! In this new environment, where market movements have become part of our daily life again, loss mitigating investment strategies move into the spotlight. In this month's Ayaltis Insight issue, we will focus on the topic of "Convexity" and develop its characteristics.

Convexity versus Tail-Hedge

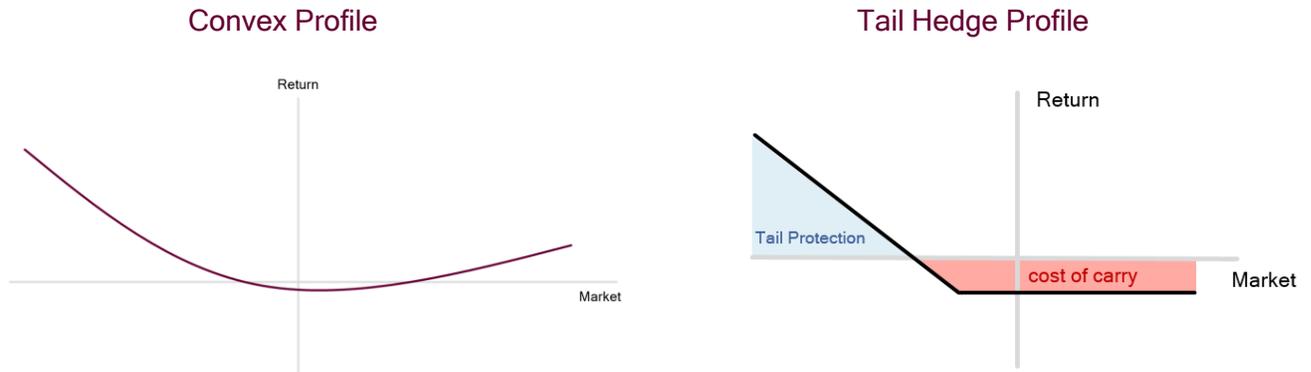
As a first step, it is helpful to consider the difference between a *convex strategy* and a *tail-risk strategy*: The latter aims to be deterministic and unavoidably directional. A tail-risk strategy is almost certain to deliver big gains when a shock hits the markets but, as in finance free lunches do not exist, this protection "hedge" comes at a high price. The common result of many traditional tail-risk strategies is very costly and inefficient. Systematic long volatility option strategies pay high premia to provide protection during crises. In the long run, it may be excessively costly and unsustainable for many investors.

In contrast, a convex strategy aims to soften the most troublesome aspects of tail-protection by reducing the negative carry that protection implies. In a nutshell, you can provide some degree of hedging to your portfolio without losing your shirt.

Strategies that show such characteristics represent a precious enhancement for any portfolio. Unsurprisingly, there are times when convexity offers high potential and can be bought at a lower price.

The charts below illustrate the difference in pay-off. While the losses of tail-hedge strategies in a positive return environment are locked in, a convex strategy is able to minimize losses in a bull market and eventually generate performance in a meaningful and positive environment.

Chart 1: Convex Profile (RHS) vs Tail-Hedge Profile (LHS)



Source: Ayaltis

When constructing a convex profile, derivatives must be included in your toolbox. Be sure to take along the user manual on the Greeks for your journey through convex strategies: It is not just delta hedging. Now you have to get used to theta burning and vega neutrality. Options are a key element in this area, but so are variance swaps and correlation swaps.

Keep in mind that variance swaps have many advantages over options. Both instruments provide a way to express a view on the volatility of the underlying asset. However, option prices are influenced by multiple factors and require continuous re-hedging. Variance swaps are a direct trade on the spread between realized and implied volatility of an underlying asset (e.g. a currency).

Financial Weather Forecast: Rising Probability of Thunderstorms

We are in the late stage of a market cycle where asset prices have been substantially distorted by central banks, through asset purchases and ultra-low short-term interest rates. Although recently the European Central Bank announced the exit of its Asset Purchase Program for the end of the year, and pre-committed on keeping interest rates at current level until June 2019, future scenarios are rapidly changing.

Furthermore, the US Fed, which anticipated the moves of other central banks ten years ago, responding to a depressed market with an unprecedented supportive effort, is now heading to the exit. Interest rates are rapidly rising. There is no doubt that the “Goldilocks” market environment we have been used to, purposely made up by Fed Chairs, Ben Bernanke and Janet Yellen, is about to end with Jerome Powell. Going into the second half of 2018, slower economic activity and monetary tightening may put the economic expansion at risk. Economic expansion never dies of old age.

Investors have moved into riskier assets unwillingly betting that 2017 may be the rule for the time being. The unprecedented growth in leverage loans, commodity prices, real estate prices,

emerging market equity and debt as well as the spill-over on more exotic assets (private debt, cryptocurrency, art, collectibles) is the result of an overextended and potentially dangerous monetary policy. These are rarely good market predictors. Counterintuitive but true.

In addition, many things have changed under the market surface. Trading liquidity has deteriorated, as a response to ever stricter bank regulation and one of the most pernicious investors' behaviours is back: "herding". Moreover, threats come from inflation expectations, political turmoil (Eurozone risks, emerging markets elections), central banks' divergence (strong dollar and the Fed's tightening) as well as dramatic lack of liquidity.

Despite the impression that fire insurance is too expensive when the house is not burning, several strategies look extremely attractive at current prices and catalysts (Italian and Turkey elections, Argentina current account deterioration) are abundant. Curve steepeners, VIX convexity, high yield single-name CDS, government CDS and shorts on overcrowded equity trades (growth stocks) offer, among others, compelling risk profiles. Implementation certainly remains the tricky part.

We are seeing uncertainties spreading across markets in subtle ways. What is not perceived on some asset classes (credit and equity) is much clearer in some others (FX and interest rates). The recent volatility on emerging market currencies is a clear symptom that ten years of quantitative easing have not reduced fundamental economic unbalances. Fed Chair Jerome Powell is walking on eggshells.

Convex profiles are hard to find, but they allow people to invest more prudently, particularly when equity multiples and credit spreads are stretched. It might be worthwhile giving these strategies a thought, when you next revisit your portfolio allocations after your well-deserved summer break.

Chart 2: Fed Fund Rates Cartoon



Thoughts and News

Hedge Funds Performance in Q2 2018

During the 2nd quarter of 2018 hedge fund indices generated mostly positive results and were able to recover from the challenging month of February. June was however, a setback for most strategies. In total Equity Hedge and Event Driven managers took the lead, even though Equity hedge suffered at the end of the quarter.

Chart 3: HFRX Indices Overview Q2 2018

Apr-18	HFRI Relative Value 0.75%	HFRI Fund Weighted Comp 0.42%	HFRI Equity Hedge 0.37%	HFRI Event-Driven 0.30%	HFRI Macro 0.29%	HFRI FoF Comp. 0.24%
May-18	HFRI Equity Hedge 1.62%	HFRI Event-Driven 1.35%	HFRI Fund Weighted Comp. 1.04%	HFRI FoF Comp. 0.68%	HFRI Relative Value 0.46%	HFRI Macro -0.19%
Jun-18	HFRI Event-Driven 0.85%	HFRI Relative Value -0.12%	HFRI FoF Comp. -0.21%	HFRI Macro -0.30%	HFRI Fund Weighted Comp. -0.46%	HFRI Equity Hedge -0.86%

Source: HFR, Ayaltis Proprietary Database

Trade War: Tariffs and Protectionism in Action

The ping pong effect on tariffs has had a lasting impact on markets as they held their breath and react to downside scenarios and then relaxed a bit if consequences were not as severe as expected. As often witnessed in life, the consequences are not what the initiator intended and we all wish more time would be spent on thinking through actions before taking them. The US industrial sector has suffered losses during the last few months, which was probably not Donald Trump's initial goal. A "real life" trade war story was portrayed in the article below about a vessel's odyssey across the ocean.

Read on at the very bottom of the following article:

<http://www.schroders.com/en/insights/economics/the-market-stories-of-may-our-charts-of-the-month/>

Hedge Fund Launches: When the Going Gets Tough, the Tough Get Going

Smooth sailing is probably not the term hedge fund managers would use to describe their experience of the last six months. Despite the sharp market movements and continued hedge fund liquidations, the segment attracts new players: During the last quarter, WorldQuant, which was, for a long time, a fund inside of Millennium, opened up to external investors for the first time and has raised more than USD 1 billion. Hedge fund launches with assets under management higher than USD 1 billion seem to be the flavour of the day. It remains to be seen whether bigger is better.

Read on at

<https://www.ft.com/content/1053798a-5d1a-11e8-ad91-e01af256df68>

<https://www.ft.com/content/9fc450fc-478b-11e8-8ae9-4b5ddcca99b3>

Artificial Intelligence - Buzz Word of Quant Investing

You may not like it. You may try to ignore it, but artificial intelligence continues to be a hot topic in investment management and the battle for talent has intensified. Hedge funds have started to pitch employees from the tech giants such as Google and Microsoft. Alliances with universities are another source of spotting future talent. “Data scientist” - the job profile in demand these days. Just to be fair to all sides of the equation, there are also voices out there discussing “AI winter”, a period of disillusionment as referred to in the second link below. In total, however, the excitement surrounding AI is definitely taking the lead.

Read on at

<https://www.ft.com/content/74869fc2-6021-11e8-ad91-e01af256df68>

<https://www.bloomberg.com/news/articles/2018-06-18/what-happens-if-ai-doesn-t-live-up-to-the-hype>

<http://www.morningstar.co.uk/uk/news/168297/how-artificial-intelligence-can-transform-investing.aspx>

Exception to the Rule: Amazon Books

In case you are heading for the US on your summer vacation, you might actually buy your summer reading at an “Amazon Books” store. Yes, a physical store. It looks similar to traditional book store at first, but it does diverge in certain aspects. The online giant actually went “local” in 2015 when it set up the first “Amazon Books” store in Seattle and slowly, but surely expanded on the number of shops. A counter trend within the struggling retail space? With a YTD stock performance of 50.11% Amazon certainly has some room for experimentation.

Read on at

https://en.wikipedia.org/wiki/Amazon_Books

<http://www.latimes.com/books/la-et-jc-amazon-stores-20180604-story.html>

Digging Deeper: How Did Hedge Funds Do So Far in 2018

It's time to embark on your well-deserved summer holiday. Just before you do so, let's recap hedge fund performance throughout 2018 so far.

A note upfront, which won't surprise you: February was a tough month across strategies and will continuously be mentioned in the lines below. February was an inflection point and, obviously, it was the change in market mood which everybody has been expecting to some extent. However, looking at the February sell-off from a distance, it does look quite different than previous market crashes: (1) First of all, it was driven by derivatives, therefore a technical market correction. (2) It showed little spill-over effects to other markets. (3) Usually in times of market crisis, Asia and Europe show more pronounced swings than the US, but this was not true this time. (4) Looking at the sell-off from a portfolio perspective: equity longs and shorts showed both the similar magnitude of movements, which somehow leads to suspicions that quantitative funds might have been unloading. So, without trying to find excuses, even if you were looking for the big sell-off, it may have caught you by surprise.

HFRI Equity Hedge Total Index

The index has generated a return of +1.16% YTD as of the end of June 2018. If it wasn't for January's performance of +2.83%, the index would be in negative territory as it suffered from losses in February and March, while it managed to navigate rather well throughout the most of the first half year in line with major equity markets. June, however, presented another challenge for the index as it lost -0.86%.

HFRI Event Driven Index

The Event Driven index reported +2.37% YTD up until the end of June 2018. Losses were mostly incurred throughout February and March. The material sell-off of equity markets affected the strategy. The intensifying trade war between the US and China impacted Event Driven managers as cross-country mergers were in the eye of intervention. The problems surrounding the merger of NXP, a Dutch semiconductor manufacturer, led to fears of a potential deal break and to a widening of the merger spread across deals. January and May represented the strongest month in terms of performance.

HFRI Macro Index

This macro benchmark index is in negative territory with -1.81% YTD until the end of June 2018. The majority of the losses also stem from the month of February. Among all HFRI main indices the HFRI Macro Index actually posted the biggest loss due to the material sell-off in equities. This is not too surprising as one would expect macro strategies to run directional exposure. Looking at its sub-components the trend following component lost the most, while the FX component and the Discretionary Thematic index actually generated flattish returns. However, unlike Event Driven, the HFRI Macro strategies failed to recover in May and June. This is particularly true for systematic macro strategies, but also a number of discretionary global macro managers incurred losses. Italy was a major topic as the Italian bond spreads massively widened based on concerns related to the new Italian government. The sharp rebound after sell-off had an impact on the strategy. The losses in emerging markets also affected the segment.

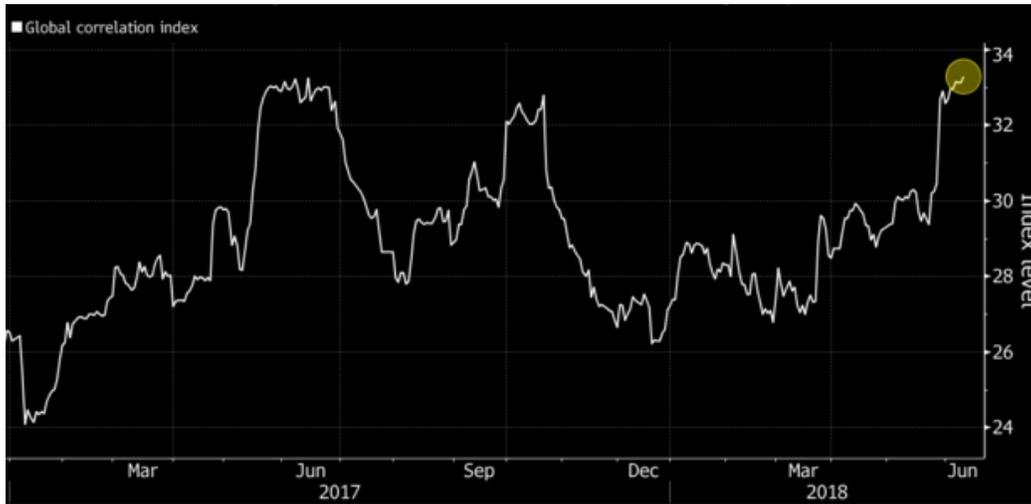
It is worthwhile taking a closer look at systematic managers:

The **HFRI Equity Market Neutral Index** shows a YTD performance of 0.25%, the strongest contribution was generated during the month of January, but also May returns particularly added to the performance. While mean reversion strategies with medium term time horizon had difficulties to adapt to the fast market swings, shorter term models showed stronger results. June contribution was actually the biggest drag on performance with -1.08% as this segment of the hedge fund space struggled with the short squeeze affecting the market.

The **HFRI Macro Systematic Diversified Index** performance, which mainly represents CTA focussed funds, represented a drag on the overall HFRI Macro index. YTD performance stands at -4.15%. It posted losses incurred by market reversals in February, March and May. February had the strongest impact with negative performance of -6.36% as it was the hardest environment for directionally oriented managers.

Neither the **Eurekahedge AI index** has managed so far to emerge from negative performance territory. After a successful start into the year, the index posted losses in February, April, May and June leading to negative YTD performance of -3.79%. While February losses might not come as a surprise, second quarter losses are a bit more challenging to explain. The strategy is still in early stages and the index is composed of only 17 constituents. Market volatility driven by political tension, temporarily distorted patterns and AI models struggled to get grip on the market movements. Models looking at factor neutral exposure face material interference from the constant change in factor ETFs, which triggers continuous rebalancing on the hedge funds side. The reversal of momentum factors caused the jitters in April.

Chart 4: Global Correlation on the Rise



Source: Morgan Stanley, Bloomberg

In summary, it remains interesting to see which segment of the hedge fund space will take the lead in 2018. The race is still wide open as return figures are rather close together. The political impact on markets is unlikely to dissolve any time soon. Also, global correlation is on the rise - a factor usually pointing to trouble ahead. So, stay tuned.



We wish you a relaxing summer and we are looking forward to your feedback. Please feel free to share your ideas with us and continue the dialogue.

Your Ayaltis Investor Relations Team

Email: ir@ayaltis.com

Phone: +41 43 502 37 60